

## Author Index

---

- Akay, G. 323  
Akiyama, S.K. 241  
Andlid, T. 199  
Avramoglou, T. 315
- Baker, A.J. 281  
Bellahcen, D. 577  
Bellon-Fontaine, M.N. 57  
Bialkowska-Hobrzanska, H. 73  
Billsten, P. 457  
Bittinger, F. 251  
Blond, J.-P. 585  
Boisson-Vidal, C. 305  
Bollen, C.M.L. 25  
Bonnavero, N. 89  
Bouchara, J.P. 299  
Bourlioux, P. 47  
Boussard, P. 111, 119  
Bouttier, S. 57  
Braun, R. 97  
Brisset, L. 89  
Bryers, J.D. 9  
Busscher, H.J. 25, 73, 407
- Calleja, G.B. 133  
Carlstedt, I. 463  
Carquin, J. 89  
Carrière, F. 585  
Castner, D.G. 333  
Cerf, A. 119  
Chabasse, D. 299  
Chattoraj, D.K. 411  
Choisy, C. 89  
Clark, S.R. 457  
Coakley, W.T. 281, 323  
Costa, M.J. 159  
Coulot, P. 299  
Cowan, M.M. 407
- Darbord, J.C. 127  
Dehay, J.-P. 119  
Dekker, A. 251  
de La Fournière, L. 585  
Dengis, P.B. 347  
Dermy, F. 127  
Destain, J. 451  
Devleeschouwer, M. 111, 119
- Devogel, D. 189  
Dhir, V.K. 103  
Dodd, C.E.R. 103  
Dufrêne, Y.F. 347  
Dusart, G. 83
- Ellouali, M. 305  
Elwing, H. 457
- Fernandes, P.A. 159  
Fontvieille, D. 577  
Fourniat, J. 57  
Fujimoto, K. 419
- Galisteo-González, F. 435  
Gallez, D. 273, 281  
Gardella, Jr., J.A. 209  
Geertsema-Doornbusch, G.I. 25  
Genet, M.J. 347  
Gerin, P.A. 347  
Goodman, A.E. 1  
Goury, V. 127  
Gratia, J.P. 567  
Gustafsson, L. 199
- Han, K.G. 57  
Handa, H. 419  
Haynes, C.A. 517  
Heuze, V. 451  
Hidalgo-Alvarez, R. 435  
Hlady, V. 481  
Holubar, P. 97  
Hommel, H. 443  
Horbett, T.A. 225  
Huyard, A. 577
- Iserentant, D. 189  
Ivanova, M.G. 585
- Jacquelin, L.F. 89  
Jeannot, J.L. 83  
Jozefonvicz, J. 305, 315, 443
- Kadouri, A. 265  
Kamath, K.R. 471  
Kamiński, J. 291  
Kataoka, K. 429
- Kawaguchi, H. 419  
Kijne, J.W. 173  
Kirkpatrick, C.J. 251  
Klein, C.L. 251  
Kondo, T. 445  
Kowalczyńska, H.M. 291  
Kwon, G.S. 429
- LaFlamme, S.E. 241  
Lahooti, S. 493  
Lam, R.T.-T. 397  
Latrache, H. 47  
Lazarova, V. 577  
Legrand, A.P. 443  
Le Magrex, E. 89  
Lepoivre, Ph. 451  
Lievens, K. 189  
Lin, F.Y.H. 493  
Lin, Y.S. 481  
Ljusegren, I. 463  
Logeart, D. 315  
Luyben, K.Ch.A.M. 165
- Malmsten, M. 463  
Manem, J. 577  
Marshall, K.C. 1, 371, 387  
Martín-Rodríguez, A. 435  
Mattila-Sandholm, T. 33  
Melo, L. 41  
Mikx, F.H.M. 407  
Moradas-Ferreira, P. 159  
Mota, M. 181  
Moussy, F. 493  
Mozes, N. 47, 67, 347
- Naito, M. 429  
Nakamura, M. 445  
Neumann, A.W. 493  
Nishiya, T. 397  
Norde, W. 517  
Nordström, K.M. 67  
Ntsama, C. 57
- Ohshima, H. 445  
Okano, T. 429  
Oliveira, A. 41  
Oliveira, R. 41

- Paquot, M. 451  
Park, H. 471  
Park, K. 471  
Pelletier, C. 47  
Pembrey, R. 371  
Penn, P. 299  
Pierzo, V. 577  
Plas, C. 97  
Policova, Z. 493  
Puig, J. 435
- Quirynen, M. 25
- Ratner, B.D. 333  
Reid, G. 73, 377  
Renier, G. 299  
Robibo, D. 397  
Romano, P. 505, 511  
Rouxhet, P.G. 347
- Sakurai, Y. 429  
Salgueiro, R. 41
- Sarkar, D. 411  
Schamberger, P.C. 209  
Schneider, R.P. 371, 387  
Serra-Domènech, J. 435  
Serres, A. 443  
Shim, H.S. 471  
Shiroya, T. 419  
Simeon de Buochberg, M. 8  
Singleton, S. 323  
Smit, G. 173  
Sousa, M.L. 181  
Stratford, M. 151  
Straver, M.H. 173  
Sumi, Y. 419  
Suzzi, G. 505, 511
- Teixeira, J.A. 181  
Thomas, N.E. 281, 323  
Thonart, Ph. 451  
Tibi, A. 127  
Tossut, P. 451  
Touhami, A. 443
- Traore, R. 111  
Tronchin, G. 299
- van der Kuijl-Booij, M. 7  
van der Mei, H.C. 25, 73  
van Hamersveld, E.H. 165  
van Loosdrecht, M.C.M. 16  
Vannini, L. 505, 511  
van Steenberghe, D. 25  
Vázquez-Juárez, R. 199  
Verachtert, H. 189  
Verger, R. 585
- Wada, T. 419  
Waites, W.M. 103  
Wirtanen, G. 33
- Yokoyama, M. 429
- Zingg, W. 493  
Zuccarelli, M. 83

## Subject Index

---

- Active bacterial count, 577  
Adherence, 299  
Adhesion, 73, 111, 119, 127, 199, 251  
Adsorption, 411  
Adsorption behavior, 517  
Aggregation, 67  
Airlift bioreactor, 181  
Albumin grafting, 471  
Animal cell adhesion, 209, 225  
Antiadhesive activity, 305  
Antibacterial agent, 127  
Antiproliferative activity, 315  
Antitumour activity, 305  
*Aspergillus fumigatus*, 299  
Attachment, 103  
*Azospirillum brasilense*, 347
- Bacillus subtilis*, 451  
Bacterial adhesion, 25, 57, 83  
Bacterial count, 577  
Bacterial metabolism, 89  
Bacterial swarming, 567  
Bactericidal activity, 83  
Bioadhesion, 25, 281  
Biochemical interaction, 165  
Biocides, 83  
Biofilm applications, 9  
Biofilm engineering, 9  
Biofilm formation, 33, 41  
Biofilm processes, 577  
Biofilm technologies, 9  
Biofilms, 1, 83, 89, 387  
Biofouling, 387  
Bioluminescence, 103  
Biomaterials, 377, 471  
Biomedical studies, 333  
Bovine serum albumin, 457  
Brewer's yeast, 165, 173  
*Brochothrix thermosphacta*, 57  
Brownian motion, 133  
Buccal epithelial cells, 119
- Calcium ion influence, 567  
Cationic latex particles, 419  
Cell growth, 209  
Cell adhesion, 241, 273, 281, 291, 323  
Cell agglutination, 281  
Cell aggregation, 133  
Cell cycle, 315  
Cell structure, 265  
Cell surface, 47, 67  
Cell surface hydrophobicity, 173, 199, 505, 511  
Cell surface properties, 73  
Cell surfaces, 371, 387  
Cell wall proteins, 159  
Cellulose, 463  
Charge distribution, 445  
Chemostats, 387  
Chicken erythrocytes, 445  
Chlorhexidine, 83  
Clay carrier, 97  
Cluster analysis, 73  
Coflocculation, 189  
Colloids, 457  
Concanavalin A, 281  
Conditioning film, 209  
Conditioning films, 387  
Conformational change, 457  
Contact angle measurements, 493  
Conventional plating, 33
- Dehydrogenase activity, 97  
Dental materials, 25  
Dental plaque, 25  
Dextran, 281  
Dextran derivatives, 315  
Diffusion, 181  
Disinfectant, 89  
DLVO theory, 165  
Drug delivery system, 429  
Drug solubilization, 429  
Dynamic conditions, 83
- E. coli*, 47  
Electrical properties, 451  
Electron spectroscopy for chemical analysis (ESCA), 209  
Electrophoretic mobility, 47, 57, 407, 445  
Ellipsometry, 463  
Endothelial cell, 251  
Endothelial cell adhesion, 493  
Environment, 25  
Epifluorescence microscopy, 33  
Erythrocyte adhesion, 323  
Erythrocyte adhesion, 281  
Erythrocyte agglutination, 281

- Escherichia coli*, 127  
 Ethyl(hydroxyethyl) cellulose, 463  
 Extracellular matrices, 225  
 Extracellular matrix proteins, 209  
 Extracellular polysaccharides, 33
- Fibrinogen, 225, 299  
 Fibronectin, 225, 241  
 Filtration, 119  
 Fimbriae, 47, 173  
 Fish gut yeasts, 199  
 FLO genes, 151  
 Floc rearrangement, 133  
 Floc size, 181  
 Flocculation, 151, 159, 165, 173, 181, 189, 505  
 Flocculation assay, 173  
 Flocculation dynamics, 133  
 Flocculation mechanism, 133  
 Flocculence, 173  
 Flocculent, 511  
 Flocculins, 159  
 Flow cytometry, 299  
 Fluorescence, 429  
 Foaming, 511  
 Force of adhesion, 493  
 Free energy of adhesion, 493  
 Functionalized albumin, 471
- Gamma-irradiation, 471  
 Globular proteins, 517  
 Glycocalyx, 33  
 Goose erythrocytes, 445  
 Growth surfaces, 567
- Hemagglutination, 407  
 Heparin, 315  
 Human buccal epithelial cells, 111  
 Human gastric lipase, 585  
 Human pancreatic lipase, 585  
 Human serum albumin adsorption, 481  
 Human urinary epithelial cells, 111  
 Hydrocarbons, 511  
 Hydrophobic microsphere attachment assay, 505  
 Hydrophobicity, 505, 511
- Image analysis, 33  
 Immobilization kinetics, 97  
 In vitro assays, 251  
 Infections, 127, 377  
 Injury, 103  
 Instability, 273  
 Instrument evaluation, 333  
 Integrins, 241  
 Interfacial instability, 281, 323
- Kinetics, 481  
*Klebsiella pneumoniae*, 111
- Laminin, 241, 299  
 Lectin, 165  
 Lipopolysaccharide, 47  
 Low molecular weight fucan, 305  
 Lysozyme, 411, 457
- Mammalian cells, 265  
 Meat, 57  
 Melittin, 397  
 Melittin analogue, 397  
 Membrane adhesion, 323  
 Mesothelial cell, 251  
 Metabolites, 265  
 Microbial, 1  
 Microbial adhesion, 377, 387  
 Microbial adhesion to hydrocarbons, 511  
 Microbial adhesion to hydrocarbons assay, 505  
 Microbial labelling, 119  
 Microorganisms, 1, 347, 371  
 Micropipette aspiration, 493  
 Molecular weight effect, 305  
 Monomolecular films, 585  
 Mucins, 463  
 Mucoadhesion, 463
- New techniques, 333
- Oral implants, 25  
 Orthokinesis, 133  
 Oxygen transfer, 181
- Pediococcus damnosus*, 189  
 Percoll density gradient, 119  
 Perikinesis, 133  
 pH, 41  
*Phanerochaete chrysosporium*, 347  
 Phospholipase A2, 397  
 Phytopathogen antagonists, 451  
 Plaque formation, 25  
 Plasmid profile, 73  
 Plasmids, 67  
 Platelet activation, 471  
 Poly(amino acid), 429  
 Poly(ethylene oxide), 429  
 Polylysine, 281  
 Polymer surface modification, 209  
 Polymer surfaces, 41  
 Polymeric micelle, 429  
 Polymers, 463  
 Polysaccharides, 41  
 Polystyrene beads, 435  
 Porcine pancreatic procolipase, 585



- Protamine, 111
- Proteases, 505, 511
- Protein adsorption, 435
- Protein separation, 419
- Pseudomonas aeruginosa*, 119, 127
- Pseudomonas fluorescens*, 41
- Pseudomonas fragi*, 57
- Pyrene, 429
- Recovery, 103
- Saccharomyces cerevisiae*, 151, 165, 189, 347, 505, 511
- Salmonella*, 103
- Secondary minimum, 133
- Serratia marcescens*, 567
- Shear stress, 251
- Silica nanoparticles, 457
- Smooth muscle cells, 315
- Solid-liquid interfaces, 411, 517
- Sonication treatment, 577
- Staphylococcus aureus*, 127
- Staphylococcus epidermidis*, 73, 127
- Static conditions, 83
- Sulfated polysaccharides, 315
- Sulfide oxidation, 97
- Surface analysis, 209
- Surface composition, 347
- Surface density gradient, 481
- Surface formation, 25
- Surface free energy, 25
- Surface hydrophobicity, 47, 451
- Surface microbiology, 33
- Surface modification, 291, 471
- Surface properties, 25, 347
- Surface roughness, 25
- Surface sulfonation, 291
- Surface sulfonic groups, 291
- Sutures, 127
- Thermal shock, 103
- Thermus*, 67
- Thin film, 273
- Thiobacillus* sp., 97
- Thrombospondin synthesis, 305
- Tomato surfaces, 451
- Total internal reflection fluorescence spectroscopy, 481
- Treponema denticola*, 407
- Tyrosine phosphorylation, 241
- Urogenital tract, 377
- Vascular prosthesis, 251
- Velcro model, 133
- Viable counts, 103
- Vitronectin, 225
- Wastewater treatment, 577
- Water, 411
- Wettability, 25, 73
- Wheat germ agglutinin, 411
- X-ray photoelectron spectroscopy, 67, 73, 333, 371
- Yeast, 151, 159, 181
- Yeast-bacteria interaction, 189
- Yeast flocculation, 133
- Zeta potentials, 73